

CLAIM AMENDMENTS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (currently amended). A method for ~~multi-subscriber joint~~ detection using a RAKE receiver structure ~~having a fixed time offset between the RAKE fingers~~, which comprises the step of:

providing the RAKE receiver structure to have a fixed time offset between RAKE fingers;

mapping a ~~multi-subscriber joint~~ detection system matrix onto the RAKE receiver structure by allocating each of the RAKE fingers to a defined section of the ~~multi-subscriber joint~~ detection system matrix; and

deactivating at least one of the RAKE fingers for reducing power consumption of the RAKE receiver structure during operation.

2 (original). The method according to claim 1, which further comprises:

measuring energy levels of signals associated with the RAKE fingers; and

determining which of the RAKE fingers are to be deactivated in dependence on the energy levels measured.

3 (original). The method according to claim 1, which further comprises:

determining a value of an assessment variable which is characteristic of a quality of service of a detected signal; and

determining a number of active RAKE fingers in dependence on a the value of the assessment variable.

4 (original). The method according to claim 3, which further comprises forming the assessment variable as a bit error rate (BER).

5 (original). The method according to claim 1, wherein the method is used in a mobile station in a mobile radio system.

6 (currently amended). The method according to claim 1, which further comprises carrying out ZF ~~multi-subscriber~~ joint detection equalization on received signals.

7 (currently amended). The method according to claim 1, which further comprises carrying out MMSE ~~multi-subscriber~~ joint detection equalization on received signals.

8 (currently amended). A RAKE receiver structure for ~~multi-subscriber~~ joint detection, comprising:

rake fingers having a fixed time offset; and

means for deactivating at least one of said RAKE fingers for reducing power consumption during operation.

9 (original). The RAKE receiver structure according claim 8, further comprising:

means for measuring energy levels of signals associated with said RAKE fingers; and

a means for determining which of said RAKE fingers are to be deactivated, in dependence on the energy levels measured.

10 (original). The RAKE receiver structure according to claim 8, further comprising:

means for determining an assessment variable which is characteristic of a quality of service of a detected signal; and

means for determining which of said RAKE fingers are to be deactivated, in dependence on a determined assessment variable.

11 (currently amended). The RAKE receiver structure according to claim 8, further comprising means for calculating ~~multi-~~
~~subscriber~~ joint detection equalizer coefficients for ZF equalization of received signals.

12 (currently amended). The RAKE receiver structure according to claim 8, further comprising means for calculating ~~multi-~~
~~subscriber~~ joint detection equalizer coefficients for MMSE equalization of received signals.

13 (currently amended). A RAKE receiver structure for ~~multi-~~
~~subscriber~~ joint detection, comprising:

rake fingers having a fixed time offset; and

a switch connected to and deactivating at least one of said RAKE fingers for reducing power consumption during operation.

14 (original). The RAKE receiver structure according claim 13, further comprising:

a channel estimator coupled to said rake fingers; and

a control and assessment unit coupled to said rake fingers, said channel estimator and said control and assessment unit measuring energy levels of signals associated with said RAKE fingers, said control and assessment unit determining which of said RAKE fingers are to be deactivated, in dependence on the energy levels measured.

15 (original). The RAKE receiver structure according to claim 13, further comprising:

means for determining an assessment variable which is characteristic of a quality of service of a detected signal; and

a control and assessment unit coupled to said rake fingers for determining which of said RAKE fingers are to be deactivated, in dependence on a determined assessment variable.

16 (currently amended). The RAKE receiver structure according to claim 13, further comprising a calculating unit coupled to said rake fingers for calculating ~~multi-subscriber~~ joint

detection equalizer coefficients for ZF equalization of received signals.

17 (original). The RAKE receiver structure according to claim 13, further comprising a calculating unit coupled to said rake fingers for calculating ~~multi-subscriber~~ joint detection equalizer coefficients for MMSE equalization of received signals.

18 (new). A method for joint detection using a RAKE receiver structure, which comprises the step of:

providing the RAKE receiver structure to have a fixed time offset between RAKE fingers;

mapping a joint detection system matrix onto the RAKE receiver structure by allocating each of the RAKE fingers to a defined section of the joint detection system matrix.

19 (new). A RAKE receiver structure, comprising:

RAKE fingers configured to have a fixed time offset; and

a mapping unit configured to map a joint detection system matrix onto the RAKE receiver structure by allocating each of said RAKE fingers to a defined section of the joint detection

system matrix.